

Terrestrial UHF TV antenna 470-694 MHz

About This Manual

This document is part of the product and describes how to install and connect the AUY 48 UHF antenna.

- ▶ Do not install or use the device until you have read and understood this document.
- ▶ Keep this document for reference throughout the service life of the device and pass it on to any new owner or user.

For the most up-to-date version of this document, go to www.kathrein-ds.com

Features

- Outdoor antenna
- UHF reception (K21 – K48)
- Suitable for vertical and horizontal polarization
- Easy installation



Scope of delivery

- Terrestrial UHF antenna AUY 48
- F-type screw-on connector for cable LCD 90/111 A+/115 A+/120 A+/130 A+, KEC 120 A+
- Weather protection sleeve
- Instructions for use

Transport and Storage

- ▶ Use the original packaging for transporting the device.
- ▶ Store the antenna in a dry place and protect it from mechanical damage.

Intended use

The AUY 48 is a UHF TV antenna. The antenna is solely designed for the limited purpose of receiving terrestrial TV signals and as indoor antennas. Under the terms of DIN 4131, an indoor antenna is defined as an antenna if the mast length does not exceed 6 meters and if its fixed end moment is at 1,650 Nm maximum. Any other use or non-observance of these instructions under the devices' accompanying documentation will result in the loss of the warranty and guarantee. The following circumstances lead to the loss of warranty and liability claims against the manufacturer:

- ▶ Improper installation
- ▶ Use of unlisted fixing material, which means that mechanical safety cannot be guaranteed
- ▶ Structural changes or interventions in the antenna, which can endanger both the mechanical and electrical as well as the functional safety
- ▶ disregarding the assembly and safety instructions in this manual

Safety Instructions



ATTENTION! DANGER FOR LIFE!

Do not under any circumstances mount an antenna under power lines. Touching power supply lines with parts of your body, with antenna parts or tools may cause an electrical shock or serious burns.
Ground the antenna installation according to DIN EN 60728-11!



Please read the following safety instructions carefully and thoroughly before you start installing the antenna, and keep observing them during the installation!

The installation of the antenna demands a high degree of responsibility for yourself and other people. For this reason, the installation must be executed by an electrician (expert in his/her trade). In order to assist you, some important safety instructions have been compiled in the following. However, these instructions are not exhaustive, as we are not aware of the local conditions.

- ▶ Do not use the antenna for purposes other than intended by the manufacturer.
- ▶ Only use the components as prescribed by the manufacturer and do not modify them.
- ▶ When selecting the antenna site, take account of the building's structural characteristics. Installation on the edge of cylindrical structures could lead to increased wind loads and vibration stress according to DIN 1055, part 4, DIN 4131. Non-observance of these instructions may cause exceeding of the load limit or the vibration resistance.
- ▶ Do not mount the antenna on buildings with rooftops made of easily inflammable materials (e.g. straw, reed or similar materials).
- ▶ Only step on firm, dry rooftops and protect yourself against falling down
- ▶ To ensure safety, ladders, scaffoldings, safety belts etc. must be in good structural order.
- ▶ Passers-by must not be endangered by falling objects. Secure the work/danger area!
- ▶ Ensure that the technical values (e.g. wind load) of the antenna mast are not exceeded. Consult the manufacturer if you do not know these values. See „Suitable Kathrein masts“ on page 4 for an overview of the masts offered by KATHREIN Digital Systems.
- ▶ Mount the antenna mast on solid ground only (walls, concrete, rafters) using the clamps, dowels and screws recommended by the manufacturer
- ▶ Immediately leave the roof in case of a thunderstorm!

Mast installation and mast calculation

- Make sure masts is in vertical position when installing it
- Only use masts or standpipes specially designed for antenna installation. Other tubes mostly do not have the necessary stability to withstand heavy wind or other climatical situations. Kathrein masts and clamps fulfil these requirements. See „Suitable Kathrein masts“ on page 4 for an overview of the masts offered by KATHREIN Digital Systems.
- The clamping range of the AVH 06 mastings clamps is 22 to 55 mm
- If the mast is to be mounted on a roof, at least 1/6 of its length must be clamped
- Make sure that the mast holders (e.g. clamps) are mounted on solid ground (wood, concrete, walls)

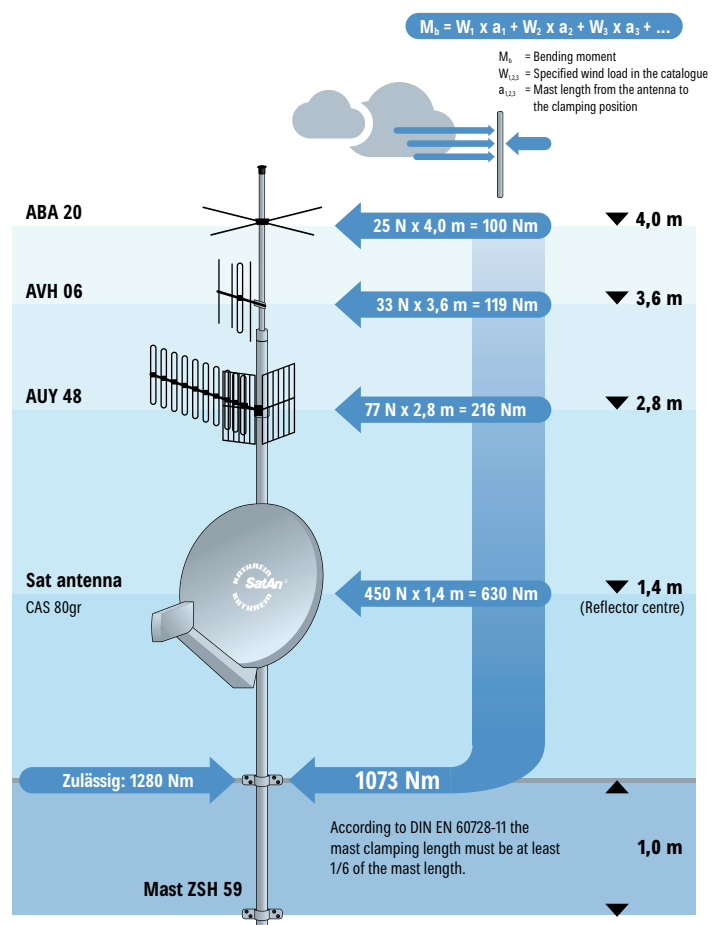


Never exceed the maximum load capacity of the mast or clamps when mounting several antennas on the mast.



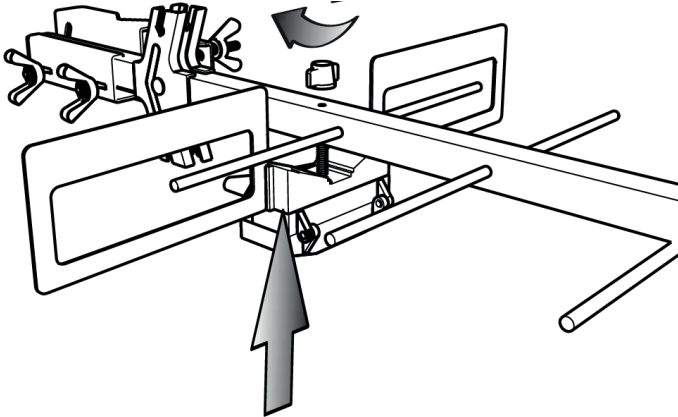
The bending moment affects the mast on the upper attachment point for all antennas. The wind load on the mast must be included in the calculation.

The overall bending moment is not to exceed the maximum permitted bending moment of the mast and must not be greater than 1,650 Nm. If the bending moment is greater, a static engineer is required to provide verification of the transfer of forces into the structure of the building.

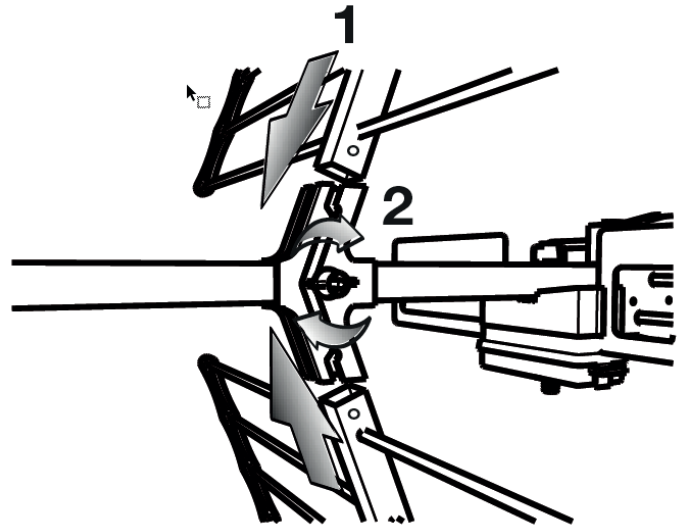


Antenna installation

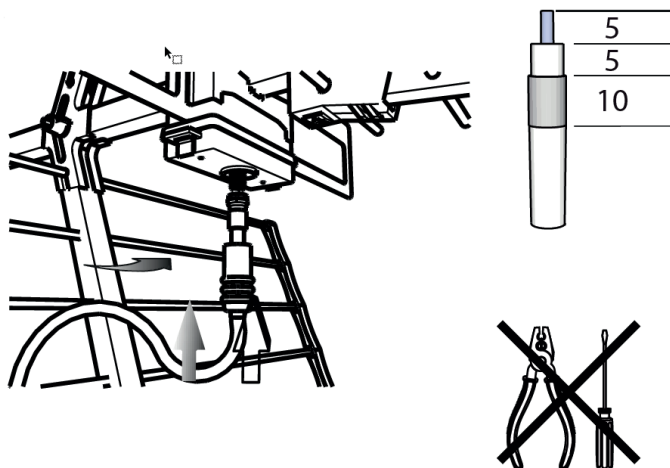
1. Attach dipole and fix with nut



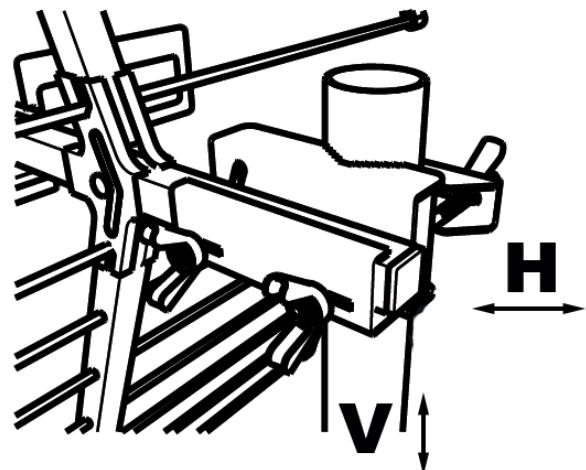
2. Push the reflectors into the socket and screw them tight



3. Connect cable to F-socket, put on weather protection cap



4. Attach antenna to mast



The antenna can also be mounted horizontally. For this purpose the mast clamp must be turned by 90°.

Suitable Kathrein masts

The following masts can be used in conjunction with the AVH 06:

Flat roof antenna mount:

- ZAS 140

Mast tubes:

- ZAS 05
- ZAS 06

Plug-in masts:

- ZSA 21
- ZSA 46

Booms:

- ZTA 11
- ZTA 12

Extending masts:

- ZSD 48
- ZSF 47
- ZSF 48
- ZSH 47
- ZSH 48
- ZSH 59 ¹⁾
- ZSH 61 ¹⁾

Rafter brackets:

- ZAS 40 | ZAS 40XL | ZAS 40XS
- ZAS 41 | ZAS 41XL | ZAS 41XS

¹⁾ Only the upper mast can be used, as the diameter of the lower mast is too large for the mast clamp.

Further information and the technical data for the masts can be found at <https://www.kathrein-ds.com>.

Repair and replacement

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Technical data

Type Order no.		AUY 48 207500002
Channels		21 – 48
Gain	dB	11 – 17
Elements		8
Reception range	MHz	470 – 694
Half-power beam width	Horiz.°	24 – 46
Front-to-back ratio	dB	28
Mast clamp range	mm Ø	22 – 60
Length	mm	1130
Wind load horizontal vertical	N	77 104 (at 130 km/h wind speed)
Packing unit/weight	pc./kg	1/2,3
Packing unit dimensions	mm	1245 x 405 x 100

Disposal



Electronic equipment

Electronic equipment is not domestic waste – in accordance with directive 2012/19/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL dated 04th July 2012 concerning used electrical and electronic appliances, it must be disposed of properly. At the end of its service life, take this unit to a designated public collection point for disposal.